

IV. *On some new or hitherto unfigured forms of South-African Butterflies.* By ROLAND TRIMEN, M.A., F.R.S., etc.

[Read February 7th, 1906.]

PLATES IV, V, VI.

I HAVE to thank once more the constant kindness of my friends and correspondents, Mr. H. L. Langley Feltham, F.E.S., of Johannesburg, and Mr. A. D. Millar of Durban, for bringing to my notice several of the interesting forms here dealt with. I would especially call attention to the new Transvaalian *Cœnyra*, brought home on behalf of the captor, Mr. H. Livingstone, by Mr. Feltham, and to the highly remarkable new *Deloneura* discovered at Port Natal by Mr. Millar.

In view of the considerable number of species among the smaller South-African butterflies—especially among the *Lycænidæ*—remaining unfigured altogether or very imperfectly delineated, I have gladly adopted Mr. Feltham's suggestion to devote two plates to the group mentioned, and especially to the genus *Lycæna*, many of the nearly-allied forms of which are most difficult of determination from descriptions alone.

The types of *Cœnyra rufiplaga*, and the singular melanic aberration of *Acraea aglaonice*, have been respectively presented to the British Museum by Mr. H. Livingstone and Mr. G. T. Weeks.

Family NYMPHALIDÆ.

Subfamily SATYRINÆ.

Genus CŒNYRA, Hewits.

CŒNYRA RUFIPLAGA, n. sp. (Plate IV, fig. 1.)

Closely allied to *C. hebe* (Trim.).

*Exp. al.*, 1 in. 4 lin.

♂. Rather dark-brown, the hind-margins slightly paler; fore-wing with two sub-apical black, silvery-centred dull-ochreous-yellow-ringed ocelli, and a large discal pale-rufous patch which partly encloses the

*upper ocellus and wholly encloses the lower one; hind-wing with two similar but smaller ocelli near hind-margin. Fore-wing: rufous patch large, wider superiorly, encircling lower half of upper ocellus, its inner edge irregular, its outer edge bounded by the inner of two indistinct parallel scarcely sinuated dark-brown sub-marginal streaks; this patch extends inwardly up to lower disco-cellular nervule, and inferiorly (much narrowed) to sub-median nervule; two ocelli placed a little obliquely, the lower one being rather nearer to hind-margin,—the third median nervule passes between them touching the lower one. Hind-wing: two ocelli divided by second median nervule, their ochreous-yellow rings with a slight rufous tinge; two darker brown sub-marginal streaks as in fore-wing, but closer together. UNDER-SIDE.—Pale-yellowish, finely but closely irrorated with fuscous; ocelli better defined than on upper-side (and in hind-wing six in number), their rings of a bright pale-yellow in an outermost fine circle of fuscous; in both wings, a premedian and a median irregular transverse rufous streak, and also a short terminal disco-cellular rufous streak which unites with median streak on 3rd median nervule. Fore-wing: rufous patch paler, and wider inferiorly, where it more or less merges with median darker rufous streak; swollen basal portion of costal nervule rufous superiorly; two parallel sub-marginal fuscous streaks thin but sharply defined. Hind-wing: 4 additional ocelli, of which the first, on sub-costal nervules, is the largest, and the second third and sixth (in the whole series of six) are smaller than the fourth and fifth; two rufous streaks completely cross wing from costa to inner-margin, the outer or median one more angulated than the other; two small traces of a basal rufous streak; sub-marginal fuscous streaks as in fore-wing, but rather more sinuated.*

This remarkable form of *Cænypa* is distinguished from both the typical *C. hebe* and its "Variety A" on the upper-side by a much darker brown, but especially by the presence in the fore-wing of a large and conspicuous discal rufous patch. These features give the upper-side quite the aspect of a *Pseudonympha*,—and especially of *P. narycia*, Wallengr. The dark-brown ground-colour quite obliterates any trace of the transverse striæ of the fore-wing, which in typical *hebe* are indistinct and ferruginous and in Variety A conspicuous and red. The rufous patch looks like a development and expansion of the ferruginous-red rings (usually thin and ill-defined, but in the ♀ sometimes diffusely widened) which characterize typical *hebe*. It is notable that in the Variety A, in which the enlargement and redness of the transverse striæ are so conspicuous,

there is no trace on either upper or under-side of the fore-wing of any rufous immediately encircling the ocelli, the outermost rings being dusky-brown; and thus, as regards this particular red marking, *C. rufiplaga* is nearer than the Variety A to typical *hebe*. In both examples of the new form only the two lower of the hind-wing ocelli are represented on the upper-side; I have noted the same feature in a King William's Town ♂ and a Bashee River ♂ of the Variety A. As regards the under-side, the rufous striæ in *C. rufiplaga* are thinner and redder than in typical *hebe*, and there are only fragmentary and obsolescent traces of the two sub-basal ones present in the latter; in the fore-wing the outermost stria is inferiorly merged with inner edge of the rufous patch. In respect of these under-side striæ, the new form is at the opposite extreme from the Variety A, which presents them in a very highly-developed condition.

The two examples here described are closely alike, and give the impression of representing a distinct local race; but this view cannot be definitely affirmed until specimens of the ♀ are forthcoming from the same district. Mr. Feltham received these ♂♂ from Mr. H. Livingstone, who notes that they were "caught on the top of Buiskop, near Warm Baths, Transvaal, on 2nd January, 1905." This, I learn from Mr. Feltham, is an elevation of some extent situated about 50 miles N. of Pretoria and half-way between that town and Nylstroom.

#### Genus PSEUDONYMPHA, Wallengr.

PSEUDONYMPHA DUPLEX (Butl.)—*Var. major*. (Plate IV, fig. 2.)

*Neococcyra duplex*, Butl., Proc. Zool. Soc. Lond., 1885, p. 758 (1886) ♂; \* and 1894, p. 560, pl. 36, f. 1.

*Pseudonympha ? Bera* (Hewits.), *ant duplex* (Butl.), Trim., S.-Afr. Butt., iii, p. 395 (1889), and Proc. Zool. Soc. Lond., 1891, p. 62.—*Var. major*.

This species was founded by Mr. Butler on a single ♂ from Somali-land,\* and was made the type of his new

\* The ♀ associated with this ♂ was subsequently recognized by Mr. Butler as distinct, and described by him (Proc. Zool. Soc. Lond., 1894, p. 559) as *N. rufilineata*. It differs in having on under-side of hind-wing three red transverse streaks—of which two, ante-median and post-median, are not present in the *N. duplex*, ♂. This ♀ does not appear to me to be separable from *P. natalii*, Boisid.

genus *Neocœnyra*. I published (*l. c.* 1891) my view that the characters specified, while separating the proposed new genus from *Cœnyra*, Hewits., seemed identical with those presented by *Pseudonympha*, and this view was confirmed on my examination of the type specimen of *duplex* in 1892. At the same time I found, on inspecting the type of *Ypthima bera*, Hewits.,—which I only knew previously from Hewitson's description—that *duplex* was quite a distinct species; *bera*, though very nearly allied, being at once recognized by its total lack of rufous marking on both the upper and under surfaces.

Several other species have since been described and placed in *Neocœnyra* by Mr. Butler; but Prof. Aurivillius (Rhop. Æthiop., 1899, p. 72)—though he adds to these *Pseudonympha natalii* (Boisd.)—remarks that it is doubtful, looking to species so intermediate as regards the form of the antennal club as *P. cassius* (Godt.), whether *Pseudonympha* and *Neocœnyra* can be distinctly separated.

Of late years, numerous examples of typical *P. duplex* have been received from British East Africa; there are eight (5 ♂♂ and 3 ♀♀) in the National Collection from various localities, and seven (6 ♂♂ and 1 ♀) in Mr. F. J. Jackson's collection from Gulu-Gulu and Kibwezi. All these are of the same limited size, not exceeding about  $1\frac{1}{4}$  in. across the expanded wings.

The large VARIETY here figured had been long known to me as occurring in tropical South Africa, Mr. F. C. Selous having sent examples from Matabeleland in 1882, and Mr. A. W. Eriksson a good series from the same country in 1885, but it was not included in my "South African Butterflies" (1887-89) because I had no evidence of its having been met with in any extra-tropical *habitat*. I referred to its existence, however (in vol. i, p. 82 note, and vol. iii, p. 395), mentioning its relationship to *P. natalii*, Boisd., its distinguishing features, and its probable identity with *duplex*, Butler; and in 1891 (*l. c. supra*) I recorded its capture—in a somewhat modified form—by Mr. Eriksson on the Okavango River in 1887-88, and described the characters in which it differs from *P. neita*, Wallengr. Not until July last had I the pleasure of seeing specimens from an extra-tropical station, which were kindly presented to me by the captor, Mr. Alfred T. Cooke, of Johannesburg. These examples were taken in November and December 1903, at White River, 15 miles from Nelspruit (a station

on the Pretoria and Delagoa Bay Railway, about 30 miles from Barberton), Transvaal, where Mr. Cooke found the butterfly extremely abundant on a wide treeless grassy plateau roughly about 10 miles in diameter, but only a few stragglers of it in the bushy and rocky surrounding country.

The size of this form presents some variation, the ♂ ranging from 1 in. 7-9 lin., and the ♀ from 1 in. 9 lin. to 2 in., but it seems always to very considerably exceed that of the typical form. Some approach to a corresponding discrepancy is found in the allied *P. nevita*, Wallengr., seven ♂ specimens of which, taken by Mr. C. N. Barker at Kwamakwaza in Zululand expand 2 in. 1-3 lin., in contrast with all I have seen from other parts of South Africa, which range in size from (♂) 1 in. 7 lin. to (♀) 2 in.

PSEUDONYMPHA NATALII (Boisd.). (Plate IV, fig. 3.)

♀. *Satyryx natalii*, Boisd., App. Voy. de Deleg., p. 594, n. 84 (1847).

♀. *Erebia natalii*, Trim., Rhop. Afr. Aust., ii, p. 203, n. 116 (1866).

♀. *Pseudonympha natalii*, Trim., S.-Afr. Butt., i, p. 81 (1887).

As only the ♀ of this species appears to have been described, I give here particulars of the slight differences which the ♂ exhibits.

♂. *Smaller*; *exp. al.*, 1 in. 5-6 lin. A little darker; rufous-ochreous discal patch in both wings smaller and narrower. *Hind-wing*: obsolescent sub-apical ocellus very faint (in one example absent); other ocelli usually less distinct,—but in one example *more* developed than in ♀, especially the third inferior small one near anal angle. *UNDERSIDE*.—*Hind-wing*: in one example each loop of submarginal ferruginous stria encloses a very small ocellus, the lower one very faint, but in five other examples there is no trace of these additional ocelli, and in three of them the looping of the stria is itself interrupted or incomplete.

I cannot find any published figure of this long-known but somewhat rare species, and the accompanying illustration will prove serviceable in determining the closely-related forms of this group. It is worth noting that, although *P. natalii* in its colouring and marking comes so

very near to *P. duplex*, yet in the remarkable feature of the double looping of the stria just beyond the ocelli on the under-side of the hind-wing\* it finds its ally in *P. bera*, Hewits.,—a butterfly without any rufous-ochreous colouring whatever, and so strongly resembling an *Ypthima*.†

Originally recorded by Boisduval from Zululand, the range of *P. natalii* has since been shown to extend to the northern Transvaal, Bechuanaland, Matabeleland, and Damaraland. Its distribution thus coincides largely with that of *P. duplex*, var. *major*; and the two forms came together in the collections made in Matabeleland by Mr. F. C. Selous, Mr. A. W. Eriksson, and the late Mr. F. Oates.

Subfamily *ACRÆINÆ*.

Genus *ACRÆA*, Fab.

*ACRÆA AGLAONICE* (Westw.). (Plate IV, fig. 4.)

♂. *Acræa aglaonice*, Westw., App. to Oates' "Matabele Land," 1881, p. 346, n. 35, pl. F, ff. 9, 10.

♂, ♀. *Acræa aglaonice*, Trim., S.-Afr. Butt., i, p. 151, n. 43, pl. III, f. 3 (♂), (1887.)

ABERRATION (MELANIC).—♀. Smoky-black: *fore-wing* with a moderately-wide rufous-fulvous costal border from base to a little beyond middle, a wider rufous-fulvous inner-marginal border from rather before middle to posterior angle, and an apical-hind-marginal series of six inter-nervular rays, diminishing in length but increasing in breadth downward; *hind-wing* with neuration across middle and a diffuse inner-marginal border pale rufous-fulvous with

\* It must, however, be observed that in several examples of both sexes of *P. duplex* the *lower* of the loops is more or less developed, as shown in my figure of that form from a Transvaal ♂ specimen.

† *P. extensa* (Butl.), from Salisbury, Mashonaland (Proc. Zool. Soc. Lond., 1898, p. 188, pl. xx, f. 1), seems to stand in the same relation to *P. duplex*, var. *major*, as *P. bera* does to *P. natalii*; that is to say, the pattern and markings closely correspond in the two forms, but there is exhibited a most conspicuous difference in colouring, *P. extensa* being entirely devoid of the rufous-ochreous patches so prominent in *P. duplex*. It occurs to me as possible that these singular relations may prove to be *seasonal* in these butterflies; but I have at present no material or data affording support to this conjecture. The type of *extensa* (♂) from Salisbury, Mashonaland, taken by Mr. G. A. K. Marshall, is in the National Collection, accompanied by a ♀ *duplex*, var. *major*, from the same locality and donor.

a slight pinkish tinge. UNDER-SIDE.—*Fore-wing*: fuscous not so dark; rufous-fulvous costal and inner-marginal borders paler, irregularly widened in parts and confluent at base; apical-hind-marginal border widely creamy, traversed by inter-nervular rays like those on upper-side but narrower. *Hind-wing*: fuscous broken and macular in basal and inner-marginal areas, and blacker,—the ground-colour there being pinkish-red; outer half of discoidal cell creamy; mesial neuration conspicuously and diffusedly creamy, penetrating fuscous area to beyond middle; hind-marginal series of seven large well-defined broad creamy-whitish lunules.

*Exp. al.* 1 in. 11 lin.

The example here described belongs to the darker variety of *A. aglaonice* described by me in Proc. Zool. Soc. Lond., 1894, p. 27, and pronounced by Mr. G. A. K. Marshall (Trans. Ent. Soc. Lond., 1896, p. 555) to be the summer form of the species; but so completely altered is its appearance by the intrusion and singular distribution of the smoky-black suffusion, and the almost entire suppression of the ordinary black spots, as well as by its unusually small size, that, had it not been for the exact agreement with the ♀ *aglaonice* in the colouring and marking of head, thorax, and abdomen, I doubt whether I could with confidence have referred it to that species. It was taken at Melville, a suburb of Johannesburg, Transvaal, by Mr. G. T. Weeks, on the 7th May, 1904.

The range of this *Acræa* extends from Southern Matabeleland to Eastern Mashonaland and Delagoa Bay, and also through the Transvaal as far south as Johannesburg and eastward to the Lydenburg district, and it further includes Delagoa Bay, Zululand, and (apparently very exceptionally) Natal.

Mr. Feltham, writing to me in June 1904, made the following interesting remarks on the *winter* appearance of *A. aglaonice* and certain other *Acrææ* at Johannesburg. "We are just now, in the depth of the cold weather, having an irruption of newly-emerged butterflies of this species. They have been with us for the last month, and are scattered generally, but singly (not in quantities) about the hills and even in the streets. The same thing happened about nine years ago, also in mid-winter, when frost is on the ground in the mornings and most butterfly life has disappeared. In 1894, also in winter, we had a great incursion of *Acræa buxtoni*, in weather so cold that the

butterflies could hardly move. Some other *Acrææ* occasionally make their appearance here, whether as stragglers or bred locally one cannot say, but almost invariably when the cold weather begins. It is difficult to conjecture why these butterflies should select the winter to visit or emerge upon the highest and coldest area for many miles round, considering what much more favourable conditions appear to be offered by the rapid downward trend of the country to the Northward as far as the 'Low Veldt' just beyond the Magaliesberg."

Subfamily *NYMPHALINÆ*.

Genus *HARMA*, Westw.

*HARMA CORANUS* (H. Grose Smith). (Plate IV,  
figs. 5, 5a.)

♂, ♀. *Cymothoë coranus*, H. Grose Smith, Ann. and Mag. Nat. Hist., ser. 6, vol. iii, p. 133 (1889).

♂, ♀. *Harma coranus*, Trim., S.-Afr. Butt., iii, App. I, p. 382 (1889).

I am glad to have the opportunity of figuring this species, which seems to be still decidedly rare in collections. The types described by Mr. Grose Smith were noted as captured by Mr. Last in the neighbourhood of Mombasa; but a broken specimen of the ♂ had reached me some years previously from Pinetown, Natal, where it was taken by Col. Bowker in June 1883. In a collection formed in Zululand by Captain A. M. Goodrich a ♂ and a ♀ occurred, which were labelled as taken in April 1887, and October 1886, respectively; and a ♂ sent from the same locality by Mr. W. H. Heale is—I am informed by Mr. Heron—in the British Museum. To these examples may now be added two brought home by Mr. Feltham, a ♂ taken by Mr. Roberts in June 1904, at Port St. John's, Pondoland, and a ♀ captured by Mr. Feltham himself, on 14th February, 1904, at Port Shepstone, Umzimkulu, Natal.

This ♀ is here figured; and on comparing it with a coloured drawing of the type example—made and kindly lent to me by Mr. Heron—I find that on the upper-side it differs in presenting a narrower discal common white band, and a much narrower and more macular sub-costal oblique white bar in the fore-wing, and also in the latter wing in having the sub-costal commencement of the discal band



indicated by a whitish spot, and that of the discal series immediately beyond the band by two small but distinct white sub-apical spots. These differences from the drawing of the type are also shown by the ♀ taken in Zululand by Captain Goodrich.

I figure the Zululand ♂ received from Capt. Goodrich in preference to Mr. Roberts' Pondoland ♂, because the under-side in the former agrees in ground-colour with Mr. Smith's description of "stramineous," while in the latter it is of a much duller tint, pale ochreous-yellow before the common dark-brown median streak and creamy-ferruginous beyond it, with all the markings before middle attenuated and all those beyond middle grey and very indistinct. Variation in the colouring of the under-side is extremely prevalent in both sexes of the nearly allied *H. alcimeda* (Godt.), the only other *Harma* yet discovered in South Africa.\*

Mr. Feltham makes the following notes on *H. coranus*:—"In a wooded dell on the Umzimkulu at Port Shepstone, on the 14th February, 1904, I saw several specimens, both ♂ and ♀, but could only succeed in capturing a single ♀, being unfortunately provided with too short-handled a net. Both sexes flew at least 6 or 8 feet above the ground, and settled at about the same height on leaves of trees in large bushes. Their flight resembled that of *H. alcimeda*, which was plentiful close by; but I noticed this peculiarity in it, that, between the strokes of the wings, the motion conveys the impression that the butterfly is progressing with its wings set slanting somewhat downward on either side instead of horizontally.

"During my stay at Port St. John's, from 1st to 7th March, 1904, I looked carefully for *H. coranus*, but did not see it; although *H. alcimeda* was quite common there, frequenting the ripe fruit of the wild vine. Before leaving I asked my friend Mr. Roberts to keep a sharp look-out for *coranus*, and he succeeded in detecting and securing the ♂ example in June 1904."

\* This genus is emphatically West-African; out of about 50 species, besides the two South-African natives under notice—of which *coranus* inhabits also the East-African Coast at Mombasa—only 5 or 6 species appear to have been met with in British East Africa, even as far inland as the Victoria Nyanza. It is thus remarkable that a small representative should have penetrated to the extreme South of the continent, and flourish there wherever the native woods still extend.

## Family LYCÆNIDÆ.

## Genus DELONEURA, Trim.

*Deloneura*, Trim., Trans. Ent. Soc. Lond., 1868, p. 81;  
S.-Afr. Butt., ii, p. 224 (1887).  
*Poultonia*, Neave, Novit. Zool., xi, p. 336 (1904).

When defining this remarkable genus in 1868, I little thought for how long a time the three Kaffrarian examples captured by my lamented collaborator, the late Col. J. H. Bowker, would remain its only known representatives. To this day, no further specimens of the type, *D. immaculata*, Trim., are forthcoming, Staudinger's insect figured (Exot. Schmett., i, pl. 94.—1887) under that name being rightly referred by Aurivillius (Rhop. Æthiop., p. 278.—1899) to the genus *Liptena*. Plötz's *Deloneura marginata* (Stett. Ent. Zeit., xli, p. 204.—1880) has been identified by Aurivillius (*l. c.* p. 284) with the type of Mr. F. Kirby's genus *Aslauga*, vid. *A. marginalis*, K. (Ann. and M. Nat. Hist., (6), 6, p. 261.—1890). No doubt the absence of specimens of *Deloneura* led to the misplacing of these West-African butterflies; yet my diagnosis and figure (*l. c.* 1868) gave very clearly the singular disco-cellular and radial neuration of the fore-wings and other characteristic features, and should have sufficed to prevent the addition to the genus of species not possessing those features.

The discovery of a new species of *Deloneura* (described below as *D. millari*), in Natal, enables me to dismiss a suggestion I made in 1868 (*l. c.*, p. 82, footnote) that the fore-tarsi might be (as in a very few other genera of Lycænidæ) perfect in both sexes, and that of the three extant examples of *D. immaculata*—all of which possessed completely articulated and clawed fore-tarsi—the two smaller might be ♂♂ and the third alone a ♀. The three examples of the new Natalian species comprise two unquestionable ♂♂, exhibiting not only unarticulate fore-tarsi, blunt and less than half the length of the tibiæ, but also a conspicuous sexual badge on the submedian nervure of the fore-wings, consisting of an apparent slight membranous expansion or inflation, covered both on upper and under surfaces of the wings—but much more densely on the upper surface—with elongated pointed scales, and

extending from the base to considerably beyond the middle. The ♂ further differs from the ♀ in having the fore-wing more pointed at the apex and more prominent at the middle of the hind-margin, and the terminal joint of the palpi longer, more slender, and more acuminate.

*Deloneura* can no longer be held as an endemic South-African genus, two Tropical-African congeners being now known, one from Kinsembo, on the coast of North Angola, and the other from Kisumu on the N.E. shore of Victoria Nyanza. These two species have been constituted as a new genus, *Poultonia*, by Mr. S. A. Neave (Novit. Zool., xi, 1904, pp. 336-37); but now that both sexes of *Deloneura* are forthcoming, it is unquestionable that *Poultonia* is in all respects structurally inseparable from the older genus. It is noteworthy that these two tropical species, coming from such widely-separated localities, are not only closely related, but that in pattern and marking they are both much nearer to the Natalian *D. millari* here described and figured than to the unicolorous *D. immaculata* from Kaffraria. They differ from *D. millari* in possessing a fuscous-brown apical-hind-marginal border on the upper-side of the *hind-wings*, broader in the Angolan *D. barca* (H. G. Smith)\* than in the Victoria-Nyanza *D. ochraceus* (Neave).†

DELONEURA MILLARI, n. sp. (Plate IV, fig. 6, 6a, 6b.)

*Exp. al.* (♂) 1 in. 5½ lin. ; (♀) 1 in. 6 lin.

♂. *Wing ochreous-yellow (rather brighter than the colour of Pentila tropicalis (Boisd.); fore-wing with a fuscous costal and apical border, hind-wing without marking. Fore-wing:* fuscous border of moderate width, commencing abruptly and obliquely at some little distance from base, and narrowing to almost a point about origin of third subcostal nervule, whence it suddenly broadens apically but rapidly diminishes again hind-marginally and terminates in a point between second and third median nervules; throughout, this dark border has a narrow external edging of duller ochreous-yellow than the ground-colour, widest before and at apex; sexual inflated badge occupying about two-thirds of submedian nervule from base. UNDER-SIDE.—*Fore-wing:* ground-colour rather paler than on upper-side; costal border fuscous-brownish with some indistinct greyish-creamy mottlings, broader than on upper-side, commencing at

\* *Durbania barca*, Rhop. Exot., iii, p. 128, pl. 27, ff. 3, 4 (1901).

† *Poultonia ochraceus*, Novit. Zool., l. c. (1904); ♂, pl. i, p. 13.

base itself, extending up to costal edge, and emitting two small downward projections, one just before and the other a little beyond middle; apical border greyish-creamy but with some fuscous-brownish clouding along its internal edge to below second radial. *Hind-wing*: from base to beyond middle of the same fuscous-brownish as costal border of fore-wing, except for a narrow inner-marginal greyish-creamy border; outer edge of this fuscous-brownish area irregularly excavated; all sub-marginal and hind-marginal area greyish-creamy; at base, three indistinct spots, a sub-basal transverse series of four spots (one in discoidal cell), and a terminal disco-cellular spot,—all greyish-creamy; indistinct traces of one hind-marginal and two sub-marginal series of small fuscous-brownish spots. Two examples.

♀. Like ♂, except that the fuscous-brownish costal-apical border of fore-wing is broader apically and hind-marginally and extends rather further along hind-margin, very nearly reaching 1st median nervule. **UNDER-SIDE.**—Border of fore-wing and whole of hind-wing of a more uniform pale ashy-grey tint, almost without the fuscous-brownish clouding shown in ♂, but with all the spots, both pale and dark, much less indistinct. *Fore-wing*: fuscous cloud and two projections on inner edge of costal-apical border smaller, but darker and more sharply defined; two additional similar small fuscous projections, in a line with but before the others, in discoidal cell. *Hind-wing*: a discal curved series of seven sub-sagittiform greyish-creamy inwardly dusky-edged spots, immediately before the inner of the two sub-marginal series of fuscous-brownish spots. One example.

In both sexes the head, with palpi and antennæ are dull-black, but the second joint of palpi is internally ochreous-yellow, and the antennæ are tipped with the same colour; there are also two spots on the front, two on the vertex, and two behind the eyes, all ochreous-yellow. Thorax fuscous-brownish clothed superiorly with rather sparse pale ochreous-yellow scales and short hairs, and marked laterally and inferiorly with several indistinct pale ochreous-yellow spots. Legs fuscous-brown, in ♂ indistinctly, in ♀ distinctly, ringed with ochreous-yellow at extremities of femur and tibia and of each tarsal joint. Abdomen pale ochreous-yellow, slightly tinged with greyish superiorly.

This *Deloneura* is at once distinguished from *D. immaculata*, Trim., the type of the genus, by its possession on the upper-side of a fuscous costal and apical border in the fore-wings, and on the under-side of a greyish-creamy and fuscous-brownish mottled costal-apical border in the fore-wings, and similar colouring, with various paler and darker

markings (more distinct in ♀), throughout the hind-wings. *D. immaculata* is of a paler ochreous-yellow than *D. millari* and is quite devoid of markings on both surfaces of the wings.

The nearest ally of *D. millari* is *D. ochraceus* (Neave), a native of Usemi and Kisumu, Kavirono Bay, N.E. shore of Victoria Nyanza, but it differs on the upper-side in having the dark border of the fore-wing, though rather narrower apically, prolonged to posterior angle, and in presenting also in the hind-wing a similar but more even dark border from before apex throughout hind-margin to anal angle. On the under-side, too, *D. ochraceus* presents a more uniform ground-colour, but with the discal series of spots paler and better defined in the hind-wing.

The existence of this notable addition to the *Lycænidæ* of the South-African Sub-Region was made known to me in November 1902, by Mr. A. D. Millar, who sent me a coloured sketch by Mr. G. W. Jeffery of Durban, Natal, of a single specimen taken by the latter, on 14th September, 1902, on the Bluff ridge overlooking the town of Durban. Though the sketch evidently represented some apparently undescribed form, it did not give the structural details necessary to determine the genus of a butterfly; but I was supported by both Mr. W. F. Kirby and Prof. Chr. Aurivillius in the view that the species depicted was new, and might prove to constitute a new genus. Mr. Jeffery noted that the example in question was "flitting about from leaf to leaf on a shrub about twelve feet in height; the day was exceedingly windy, so perhaps the insect might have been brought for some distance by the wind;" and he adds that he soon after revisited the locality, and spent a whole day there, but did not meet with another example.

Not until August last had I the pleasure of receiving from Mr. A. P. Millar both Mr. Jeffery's original specimen, and a second captured by himself, with some other examples, in May 1905. It was at once clear that the butterfly was a *Deloncura*, but both examples being male, it seemed possible that they might be that sex of the exceedingly rare *D. immaculata*. Mr. Millar, on my representing how things stood, most kindly found and sent me a female, which is described above, and which satisfactorily establishes the form as a distinct species of the genus.

Considering that it is over forty years since the discovery of *Deloneura* in South Africa, and over thirty-five since I published in our "Transactions" the discoverer's account of the habits of *D. immaculata*, in the only locality and on the only occasion recorded for its appearance, great interest attaches to the following details relating to the new Natalian species, communicated to me by Mr. Millar. He writes under date of the 9th June, 1905:—"On hearing that three more specimens had been taken on 30th April, 1905, about the same place where Jeffery took his example, several of us went in search of the butterfly; and on the 7th May we managed to secure no less than eight specimens, some of which were fresh from the pupa, and three of which were captured by myself. The weather being windy, the butterfly was not active; but on passing the tree where previous captures had been made, one of our party disturbed the branches, and out flew about a dozen. They took short flights, but at an elevation of about fifteen feet, and like *Liptena aslauga* settled on twigs and dead branches, where the assimilation of the underside colouring rendered them difficult of detection. Their flight was slow and wavering, resembling that of a day-flying moth of the same colouring which flew in the same locality; and so strong was the likeness of the butterfly to the moth on the wing that on several occasions great efforts were made in capturing what was thought to be the former but turned out to be the latter. I send you a specimen of the moth in question. All the specimens of the butterfly were found about one tree, which I think it probable is the food-plant."

This account agrees very remarkably with the observations on *D. immaculata* made by Col. Bowker, who particularly noticed the resemblance, both in colouring and flight, of the butterfly to the "yellow tree-moth," common in wooded spots.

Several species of the Liparide genus *Aroa*, Walk., are numerous and widely distributed in South Africa. The species forwarded by Mr. Millar as that with which *D. millari* associates at Durban, is *A. punctifera*, Walk.,\* which occurs also in the eastern part of Cape Colony and

\* Sir G. Hampson (Ann. S.-Afr. Mus., iii, pp. 406-7, 1905) places this species, with some others formerly included in *Aroa*, in the old genus *Euproctis*, Hübn., and limits *Aroa* to *A. discalis*, Walk., and one other species.

at Delagoa Bay. I give here (Pl. IV, fig. 7) a figure of the example of this moth received from Mr. Millar, in order to show how completely the butterfly accords with the moth in prevalent ochreous-yellow colouring, though differing considerably as regards the upper-side of the fore-wing and the under-side of part of the fore-wing and the entire hind-wing. The case is instructive as indicating how effective in flight for mimetic purposes can prove even an inexact likeness, provided that the general colouring and the action on the wing are the same. As far as human observation is concerned, it certainly would appear that *Deloncurea* has successfully evaded notice—even in so long known and well “worked” a locality as Durban—mainly by simulating the colour and motion of certain common more or less gregarious day-flying moths with which it associates, and which are most probably protected species rejected or avoided by insectivorous animals.

#### Genus LYCÆNA, Fab.

LYCÆNA PATRICIA, Trim. (Plate V, figs. 8, 8a.)

*Lycæna patricia*, Trim., S.-Afr. Butt., ii, p. 20 (1887).

I indicated (*l. c.*) the close affinity of this species with *L. parsimon*, Fab., notwithstanding the great disparity in the colouring of the males on the upper-side of the wings, and mentioned how the exceedingly similar females could be distinguished by the longer tail and one fewer sub-basal under-side spot in the hind-wing characteristic of *L. patricia*.

Since my description was published the extended South-African range of this form has been considerably enlarged, Mr. G. A. K. Marshall having taken it at Gadzima in Mashonaland, in 1895.\* The Transvaal variation which I noted (*l. c.*, p. 21)—and which presents in both sexes a darker under-side with all the sub-marginal markings very much fainter—has been taken (“1st to 3rd January, 1904”) by Mr. Feltham at Venter’s Kroon, on the Vaal River.

In view of the unmistakably close alliance existing between *L. parsimon*, *L. patricia*, and *L. glauca*, Trim., much interest attaches to Mr. Feltham’s note that he took all three forms, as well as the dark variation of *patricia*, at the same time and at the same spot, “on flat low-lying grass-land dotted with mimosa trees.”

\* Mr. A. G. Butler, in Proc. Zool. Soc. Lond., 1898, p. 192.

LYCÆNA ORTYGIA, Trim. (Plate V, figs. 9, 9a.)

*Lycæna ortygia*, Trim., S.-Afr. Butt., ii, p. 26 (1887).

Since I noted (*l. c.*) the occurrence of an example of this near ally of *L. asteris*, Godt., near Cape Town, several specimens of both sexes have been taken in the Cape Peninsula, vid., by Mr. E. R. Howes at Hout Bay, Mr. H. Bevan at Simon's Town, and Mr. Feltham at Muizenberg. These individuals are all of smaller size than the typical form, and appear to represent a slight local variation; in which the upper-side in the ♂ is of a purer less violaceous-blue than in the typical form (from Eastern Cape Colony, Basutoland, and the Orange River Colony), and in the ♀ seems constantly, instead of rarely, to present a discal series of fuscous spots in the fore-wing. The examples figured were taken on Muizenberg Mountain on the 1st (♂) and 4th (♀) January, 1900, by Mr. Feltham, who writes:— "This is not an uncommon species in its proper habitat. I have only found it on or just below the summits of the Table and Muizenberg mountains, especially the latter; its favourite spots being little gullies or sheltered corners of the rocky ridges on the top of the range. The ridge in which the Kalk Bay caves are situated is a good example of this butterfly's haunts."

Another local variation of *ortygia* was discovered in December 1893, at Knoffok's Kraal, in the Caledon district, Western Cape Colony, by Mr. T. D. Butler, then taxidermist of the South-African Museum. These examples are like the Cape-Peninsula form as regards the purer less violaceous-blue of the upper-side, but the ♂♂ (10) have the hind-marginal fuscous border of the fore-wing quite three times as broad, and the ♀♀ (8) have the blue more restricted in area and unmarked by any fuscous discal spots. This variation also differs in being fully as large as the typical form.

LYCÆNA TANTALUS, Trim. (Plate V, figs. 10, 10a.)

*Lycæna tantalus*, Trim., S.-Afr. Butt., ii, p. 38 (1887).

This rare *Lycæna* seems to be little known to Lepidopterists, and since the publication of my description above quoted I have seen only six additional specimens, taken at Malvern, Natal, by my friend, Mr. C. N. Barker,



and presented to me by him with the rest of his fine collection of South-African Lepidoptera in 1898.

Although on the upper-side not unlike the variety of *L. niobe*, Trim., found in Kaffraria and Natal (*l. c.*, p. 37), on the under-side this species is remarkably different, especially in wanting the transverse whitish band beyond middle of hind-wing, and in presenting a discal series of elongated (not rounded) fuscous spots, with scarcely any indication of whitish edging, and a narrower and much more sharply-defined submarginal fuscous lunulated streak, together with a paler ground-colour, quite hoary-grey in hind-wing.

Mr. Barker notes this butterfly as frequenting grassy spots on hill-sides on the coast of Natal.

LYCÆNA IGNOTA, Trim. (Plate V, fig. 11.)

*Lycæna ignota*, Trim., S.-Afr. Butt., ii, p. 39 (1887).

Both sexes of this obscurely-tinted form were sent from the Potchefstroom and Lydenburg districts of Transvaal in 1879 by Mr. T. Ayres; and besides these (6) examples, I have received 6 ♂♂ and 2 ♀♀ taken at Estcourt, Natal, in 1893 and 1898, by Mr. J. M. Hutchinson and Mr. C. N. Barker. The dull greyish-brown upper-side is similar to that of *L. letsea*, Trim. (Trans. Ent. Soc. London, 1870, p. 362, pl. vi, ff. 3, 4), but darker, and wanting the yellowish anal-angular lunules in the hind-wing; while the under-side is characterized by the very imperfect development of all the ordinary whitish markings.

Mr. C. N. Barker records that *L. ignota* occurs among grass in the "Thorn" country near Estcourt.

LYCÆNA PEPHREDO, Trim. (Plate V, fig. 12.)

*Lycæna pephredo*, Trim., S.-Afr. Butt., iii, App. p. 389 (1889).

This is another of the duller-coloured *Lycæna* in which both sexes are of an unvaried dark greyish-brown on the upper-side, much like that of *L. ignota*, Trim., but darker, and without any trace of the ordinary anal-angular spot in the hind-wing. The pure-white cilia constitute a further distinction; and the under-side differs very widely from that of *ignota*, alike in the ashy-grey ground-tint, in the

conspicuous development of its discal white band, and the irregular obsolescence or failure of many of the ordinary markings.

Estcourt, in Natal, remains the only known locality to me of this species, which was discovered by Mr. C. W. Morrison, and sent (5 ♂♂ and a ♀) by him for my determination in 1888. Mr. Morrison wrote that he took about a dozen examples; and two more captured in the same locality were presented to me more recently by Mr. C. N. Barker, with a note that they were found about grassy spots.

LYCÆNA DOLOROSA, Trim. (Plate V, figs. 13, 13a.)

*Lycæna dolorosa*, Trim., S.-Afr. Butt., ii, p. 41 (1887).

In the ♂ the violaceous of the upper-side is of a rather sombre tone, and in the ♀ it is much reduced in area being very broadly bordered with fuscous—especially in the fore-wing; and the under-side is also of a duller brownish-grey than usual, with the ordinary markings scarcely darker than its ground-colour and inconspicuously whitish-edged. These features characterize the typical specimens described by me (*l. e.*) from Kaffraria and Natal; but as regards the under-side, examples recently taken by Mr. Feltham at Delagoa Bay and (one out of three) at Johannesburg, differ markedly, having not only a much paler ground-colour, but all the white markings very distinct and sharply defined, especially in the hind-wing. The figures here given delineate a typical ♂ from Estcourt, Natal, taken by Mr. J. M. Hutchinson, and a ♀ of the variation just noted from Delagoa Bay.

Mr. Feltham writes:—“I first found this butterfly on the Umvelosi River, about 20 miles up from the mouth at Lourenço Marques, on a patch of hard gravelly land forming a low elevation at some distance from the river-bank. In flight it resembles *L. lysimon*, being weak but rather persistent on the wing, and keeping always just above the ground. It was quite local,—the entire area on which I found it was about 100 yards square.

“Its extremely local habit is further shown by the fact that, although I had been collecting at Johannesburg since 1893, I never found this species there until after my return from Delagoa Bay in 1903, when I fell in with it on a very circumscribed area on the grassy ledges of the hills

just north of the town. This was on 15th and 16th November, and I met with it subsequently in the same locality on December 6th and 13th, and on August 28th and November 16th, 1904." It is the ♀ taken on the date last-named that agrees on the under-side with the Delagoa Bay examples above mentioned.

LYCÆNA LUCIDA, Trim. (Plate V, figs. 14, 14a.)

*Lycæna lucida*, Trim., Trans. Ent. Soc. Lond., 1883, p. 348 ; and S.-Afr. Butt., ii, p. 47 (1887).

This member of the *lysimon*-group of the genus is readily recognized by the longitudinal white ray from the extremity of the discoidal cell to near the hind-margin of the hind-wing on the under-side. It is rather remarkably variable in size, the ♂ ranging from  $8\frac{1}{2}$  to 11 lines, and the ♀ from  $8\frac{1}{2}$  to  $12\frac{1}{2}$  lines. The ♂ varies very little in the violaceous of the upper-side which has a slight pink tinge ; but the ♀ varies very considerably, from a wholly dark-brown upper-side to one with smaller or larger violaceous patches.

The range of the species in South Africa is very wide, but it has not to my knowledge been met with in the Cape Colony west of Knysna. In the tropical area it has occurred not only in Ovampoland and South Angola, but on the eastern side in Nyassaland, German East Africa, and Zanzibar—from which latter locality Mr. P. de la Garde, R.N., showed me a ♀ captured by him in August 1893.

Mr. Feltham remarks that *L. lucida* is not very common at Johannesburg, frequenting grassy places along the northern slopes of the Witwatersrand line of hills. I agree with him in thinking it probable that so small and inconspicuous a species is in reality much commoner than it appears to be.

The examples figured are a ♀ taken at Malvern, Natal, by Mr. C. N. Barker, and a rather small ♂ captured at Johannesburg by Mr. Feltham.

LYCÆNA STELLATA, Trim. (Plate VI, figs. 15, 15a.)

*Lycæna stellata*, Trim., Trans. Ent. Soc. Lond., 1883, p. 349 ; S.-Afr. Butt., ii, p. 49 (1887).

As pointed out by me in 1887 (*l. c.*) this very small and

distinct *Lycæna* best agrees with *L. lucida*, Trim., in its under-side markings, though with a rather more yellowish tint and fainter spots in the hind-wing; but the upper-side is totally different, not only from *lucida* but also from all its congeners, being blackish with many sub-annular and other white spots arranged in correspondence with those of the under-side.

The original discovery of this interesting form near Burghersdorp, N.E. Cape Colony, by Dr. D. R. Kannemeyer in 1882-83, was followed in February 1892, by Mr. F. Graham's capture of thirty-six specimens at Holspruit about 21 miles from Dordrecht in the Wodehouse district. Mr. Graham's observations fully confirm Dr. Kannemeyer's regarding the extremely local habit of *L. stellata*, and its abundance where it does occur. The places named are both in the Stormberg range of mountains, and remained the only recorded habitats until 1900, when at the Tring Museum I found a long series of the species from so distant a region as British Central Africa, in an extensive collection formed by Dr. Ansoerge at various localities between the coast and Lake Nyassa.

Both surfaces of the wings seem to be remarkably constant in tint and markings. The paired sexes were taken by Mr. Graham near Dordrecht in February 1892; the ♀ was  $8\frac{1}{2}$  lines in expanse, but the ♂—the smallest I have measured—scarcely over 6 lines. Both Dr. Kannemeyer and Mr. Graham observed that the insect was only in abundance about damp ground near water, active on the wing, and constantly settling on flowers; on one occasion Mr. Graham found at least a dozen upon fresh cow-dung.

The ♂ and ♀ figured are from Mr. Graham's Dordrecht series.

LYCÆNA METOPHIS, Wallengr. (Plate VI, figs. 16, 16a.)

*Lycæna metophis*, Wallengr., Wien. Ent. Monatschr. 1860, p. 37, n. 17; and K. Sv. Vct.-Akad. Förhandl., 1872, p. 48, n. 21.

Since I described (S.-Afr. Butt., ii, pp. 55-6) the distribution of this *Lycæna*, its known range has been extended to Natal, where it has been taken at Estcourt, Weenen county, by Mr. J. M. Hutchinson and Mr. C. N. Barker, as well as by Mr. G. A. K. Marshall, who has

contributed a series to the National Collection. The ♂ here figured is one of the Estcourt examples taken by Mr. Barker, and the ♀ an example captured by Mr R. M. Lightfoot at Port Nolleth, Namaqualand, Cape Colony, in August 1890.

LYCÆNA BOWKERI, Trim. (Plate VI, figs. 17, 17a.)

*Lycæna bowkeri*, Trim., Trans. Ent. Soc. Lond., 1883, p. 351; S.-Afr. Butt., ii, p. 88 (1887).

This very distinct ally of *L. thespis* (Linn.) seems to be only known from a limited area in Natal. It was discovered by the late Col. J. H. Bowker in 1881, near the "halfway house" between Durban and Maritzburg overlooking the Inchanga valley. In the Barker collection presented to me in 1898 there were three ♂♂ and two ♀♀, taken at Karkloof, some 20 miles to the N.W. of Maritzburg, and the species was noted by the donor as occurring about grass on the outskirts of woods. The ♂ and ♀ figured are from Mr. Barker's series.

LYCÆNA NATALENSIS, Trim. (Plate VI, figs. 18, 18a.)

*Lycæna natalensis*, Trim., S.-Afr. Butt., ii, p. 77 (1887).\*

To the various characters which I have particularized (*l. c.*) as distinguishing this species from both *L. moriqua*, Wallengr., and *L. jasons*, Guer., may be added the presence in both sexes of a conspicuous oblique superior white streak near the extremity of the club of the antennæ—the actual tip itself being dull-reddish.

Except for a ♀ ticketed Delagoa Bay in the British Museum (Hewitson collection), and another from Etshowe, Zululand, collected by the late Mr. T. Vachell, I have seen no examples but those from Natal, Estcourt and Bushman's River furnishing the majority of the known specimens.

\* Mr. G. A. Butler (Proc. Zool. Soc. Lond., 1896, p. 119) identified this species with his *L. sigillatus* (Ann. and Mag. N. H., 4th Ser., XVII, p. 483. 1876) from Abyssinia; but on examining his types (a ♂ and a ♀) of the latter in the British Museum, I found them to be identical with the allied but quite distinct *L. moriqua*, Wallengr. Independent support of this determination of mine is afforded by the fact that, in the National Collection, the types of *sigillatus*, Butl., are associated with *moriqua* as synonymous.

## Genus ZERITIS, Westw.

ZERITIS OREAS, Trim. (Plate VI, figs. 19, 19*a*.)

*Zeritis oreas*, Trim., Trans. Ent. Soc. Lond., 1891,  
p. 176.

*Chryсорitis oreas*, Butl., Proc. Zool. Soc. Lond., 1897,  
p. 849.

This extremely distinct species of *Zeritis*—as I have pointed out (*l. c.*)—comes closer to *Z. chrysantas*, Trim., than to any other congener, but its under-side marking is quite unique.

I have given (*l. c.*) Mr. J. M. Hutchinson's interesting account of his discovery of *Z. oreas* in the year 1890, at an estimated elevation of about 7,000 ft. in the Drakensberg Mountains, Natal, and Mr. Butler has published (*l. c.*) Mr. G. A. K. Marshall's notes of his subsequent visit with Mr. Hutchinson to the same locality, in September 1896, identifying it as the "summit of Niginya, 6,500 ft., some 10 miles from Ulundi." On this visit over fifty specimens were taken, but only in a limited area of two or three acres. No other locality for this butterfly is known. The ♂ here figured is one of those captured by Mr. Marshall on the occasion mentioned, and the ♀ was taken by Mr. Hutchinson, and presented to me by Mr. C. N. Barker in 1898.

## Genus ARRUGIA, Wallengren.

ARRUGIA PROTUMNUS (Linn.). (Plate VI, figs. 20,  
20*a*, 20*b*.)

*Papilio protumnus*, Linn., Mus. Lud. Ulr. Reg., p. 340, n.  
158 (1764), and Syst. Nat. (Ed. 12), p. 794, n. 258  
(1767).

I give figures of the typical (Cape Town) form of this remarkable South-African butterfly, because those hitherto published—Cramer's, Herbst's, Donovan's, and Staudinger's—are extremely poor, and fail to render its characteristic features with any approach to accuracy.

As described by me in S.-Afr. Butt., ii, p. 228 (1887), the typical form of *protumnus* is the dullest in colouring, and appears to belong only to the extreme S.W. of Cape

Colony; while two or three variations—all in the direction of a brighter yellow ground-colour and diminution of the black markings as well as of the blackish borders,—prevail in the other parts of the Colony, and (to judge from a single Transvaal ♂) probably also further to the north.

An outline figure of the fore-leg of the ♂ is shown, to illustrate the full development of the tarsi,—a condition so rare in the Lycænidæ of that sex that I only know of two other genera, *Lachnocnema* and *Aslauga*\*—also African—in which it occurs.

\* I have only quite lately discovered that the genus *Aslauga* (Kirby, 1890) agrees with the two other Lycænidæ genera named in this respect. Mr. A. D. Millar sent me, in 1891, from Durban, a single example of what I held to be a slight variation of the exceedingly rare *Aslauga purpurascens* (Holland), described [*'Psyche,'* 1890, V, p. 424] from a single specimen taken on the Ogowe River, Gaboon. Dr. Halland's insect was recorded as a ♀, and the Durban specimen appeared to be of that sex from an examination of the fore-tarsi. I returned the latter to Mr. Millar, and not until early in January 1906 did I see it again; when it came accompanied by a second example, taken at Durban recently by Mr. H. A. Green, in whose collection it had been detected by Mr. Millar. This second South-African specimen is undoubtedly a ♂, possessing a rather conspicuous white-scaled elongate sexual badge seated on the upper-side of the sub-costal nervure of the hind-wing, but the fore-tarsi are fully articulated and clawed terminally just as in the ♀. In the first Durban specimen there is no sign of this badge, and the rather fainter and duller colouring supports the belief that it is a ♀.

On comparing these examples with the closely-allied *A. marshalli*, Butler (Proc. Zool. Soc. Lond., 1898, p. 908), of which I possess four specimens taken at Salisbury, Mashunaland, by Mr. G. A. K. Marshall, I find that three of the latter exhibit a similar ♂ badge, but thinner and of a duller white than that borne by the Durban individual, while having the fore-tarsi completely articulated and bearing terminal claws.

It is noticeable that the two Natalian specimens are considerably closer to the Gaboon type of *A. purpurascens* than to the Mashunaland *A. marshalli*. From the former they differ chiefly in the very much fainter almost obsolete common dark streak running from immediately before apex of fore-wing to a little before anal angle of hind-wing on the under-side; while the Mashunaland form is on the upper-side duller and browner, with a fainter purplish (not blue) gloss, and not darker marginally or paler centrally in fore-wing as in *purpurascens*, and differs besides on the under-side in its warmer more ochrey-yellowish tint not inclining to whitish towards the hind-margins, so that the fuscous irroration is less conspicuous, the common dark streak being extremely faint or altogether absent. It is possible that *A. marshalli*, which has the angulation of the wings more pronounced, may be a seasonal form of *A. purpurascens*.

## Genus D'URBANIA, Trim.

*D'Urbania*, Trim., Trans. Ent. Soc. Lond., 3rd Ser., I,  
p. 400 (1862).

D'URBANIA LIMBATA, Trim. (Plate VI, fig. 21.)

*D'Urbania limbata*, Trim., S.-Afr. Butt., ii, p. 217 (1887).

*D'Urbania amabilis*, Staud., Exot. Schmett., p. 268 (1888).

This near ally of the type of the genus, *D. amakosa*, Trim., is easily distinguished by the different form and position of the hind-marginal orange-red band on the upper-side of both wings and also on the under-side of the fore-wings. It was first taken (1882-84) at Estcourt, in Natal, by Mr. J. M. Hutchinson, and afterwards met with in the same locality by Mr. C. W. Morrison. The late Mr. A. E. Hunt took a series of both sexes at Newcastle, in the northernmost part of Natal, in April of 1893 and 1894; and also found the pupæ of a *D'Urbania* attached to the under-surface of over-hanging stones on the same hill where *D. limbata* was numerous. He sent me two dead pupæ and four pupa-skins, which presented no marked difference from those of *D. amakosa*, except that on the back and sides the tufts of hair on the thorax and basal half of the abdomen are *all* sandy, and those on the terminal half of the abdomen are composed partly of sandy (instead of whitish) and partly of dark brown bristles.

I have not seen examples of this species from any other locality than those above mentioned, but Staudinger notes "Transvaal" as a *habitat*.

D'URBANIA SAGA, Trim. (Plate VI, fig. 22.)

*D'Urbania saga*, Trim., Trans. Ent. Soc. Lond., 1883, p. 354;  
and S.-Afr. Butt., ii, p. 219 (1887), iii, App. II,  
p. 417 (1889).

This butterfly is altogether unlike its congeners, and may at once be recognized by the conspicuous sharply-angulated inwardly brown-bordered white discal stripe on the under-side of the hind-wing. It may be noted, too, that the club of the antennæ is more abruptly formed, rounder, and broader than in *D. amakosa* and *D. limbata*.

First discovered at Hex River, Worcester District,



Cape Colony, in 1882, by Mr. L. Péringuey, Assistant Curator of the South African Museum, and afterwards found by me at Ceres in the adjacent district of Tulbagh, *D. saga* is not known to me from any other locality; but, looking to the nature of its haunts in rocky mountainous spots, its reluctance to take flight, its dull tints, and the close resemblance of the under-side colouring to that of the rocks or stones on which it rests,—it is probable that the restriction of its range is more apparent than real, and that it will be met with in many other mountain nooks in the Cape Colony.

## EXPLANATION OF PLATES.

## PLATE IV.

- FIG. 1. *Cenyrta rufiplaga*, n. sp. ♂. (Buiskop, Transvaal.)  
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2. *Pseudonympha duplex*, Butl.—Var. *major*. ♂. (White  
River, Transvaal.) Page 61.
3. *Pseudonympha natalii*, Boisd. ♀. (Matabeleland.)  
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4. *Acræa uylavnicæ*, Westw.—Melanic aberration, ♀.  
(Johannesburg, Transvaal.) Page 64.
- 5, 5a. *Harma coranus*, H. G. Smith, ♂ and ♀. (♂ from  
Etshowe, Zululand, ♀ from Port Shepstone, Natal.)  
Page 66.
- 6, 6a. *Deloneura millari*, n. sp. ♂ and ♀. (Durban, Natal.)  
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- 6b. Fore-leg of ♂.
7. *Aroa punctifera*, Walk. ♂. (Durban, Natal.) Page 72.

## EXPLANATION OF PLATES.

## PLATE V.

- FIGS. 8, 8a. *Lycæna patricia*, Trim. ♂ and ♀. (Malvern, Natal.)  
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- 9, 9a. *Lycæna ortygia*, Trim. ♂ and ♀. (Muizenberg, Cape  
Peninsula.) Page 74.
- 10, 10a. *Lycæna tantalus*, Trim. ♂ and ♀. (Malvern, Natal).  
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11. *Lycæna ignota*, Trim. ♀. (Estcourt, Natal.)  
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12. *Lycæna nephredo*, Trim. ♂. (Estcourt, Natal.)  
Page 75.
- 13, 13a. *Lycæna dolorosa*, Trim. ♂ and ♀. (♂ from Estcourt,  
Natal, ♀ var. from Delagoa Bay.) Page 76.
- 14, 14a. *Lycæna lucida*, Trim. ♂ and ♀. (♂ from Johannes-  
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